

melt, her northern tributaries would swell her load to uncontainable limits, and she would rush toward the Gulf, spilling nutrient-rich waters and rich earth sediments over her banks, and across the land, layer by layer. Every few thousand years, she would alter her course, taking a new route to the sea, replenishing areas she had previously abandoned. That is what built Barataria-Terrebonne. Human tampering with that dynamic and powerful system is what threatens to destroy it.

With the 1927 flood weighing heavily upon the minds of the nation, the demand to ensure that no such catastrophe would strike again was met by the construction of hundreds of miles of levees. With that act, the "Mother River" was confined to her banks, keeping South Louisiana safe in the short term, but ultimately threatening to destroy that which we sought to save. Without the natural cycle of flooding, we have sent the river's bed-load of sediments, an average 200,000 metric tons annually, cascading off the edge of the continental shelf, into deep ocean waters, rendering this building and nourishing material useless. Ironically, we have also made ourselves frighteningly vulnerable to destruction by flooding from gulf storms because as our buffer of wetlands recedes, we receive more of the undampened fury of storm surges which are an ever-present threat from hurricanes.

Without the Mississippi's annual nourishment, our wetlands are sinking, subsiding into the gulf. We have exacerbated the rate of demise by crisscrossing our vast marshes with canals -- both for navigation and oil exploration. These wounds do not heal, but slowly enlarge from wave action, allowing salt water to intrude far into the system, and eventually converting marshland to open water.

Barataria-Terrebonne is plagued with water quality problems as well, with frequently high levels of herbicides, other pesticides, nutrients from fertilizers and sewage, and sewage-related bacteria from poorly operating or non-existent sewage treatment. These problems threaten fish populations and public health, and require oyster beds to be closed to harvesting. Being blessed with an abundance of oil and gas, we also have our share of accidental oil spills from the harvesting and transport of these resources.

These problems have resulted in habitat degradation. This degradation, as well as the introduction of exotic species, threatens our native and migratory populations of fish and wildlife. When these resources are threatened, the people of the Barataria-Terrebonne Estuary who have made a way of life centered on wildlife resources, are threatened as well.

## History of the Barataria-Terrebonne National Estuary Program

After its admission into the NEP in 1990, the Barataria-Terrebonne National Estuary Program was given five years to produce a management

plan, called the Comprehensive Conservation and Management Plan (CCMP). This was a very busy fiveyear period in which hundreds of people, representing not only federal, state, and local government, but fishermen, farmers, educators, scientists, representatives from oil companies and environmental groups and many others came together to form the governing body, or BTNEP "Management Conference". Committees within this body oversaw identification of the seven Priority Problems, and the production of a series of highly

technical reports that are still widely used by resource agencies and researchers. This group also oversaw the development of the CCMP management plan that was completed in 1996. This plan contains 51 separate strategies called "Action Plans" that outline procedures for addressing the seven Priority Problems and preserves and restores the unique culture of the Barataria-Terrebonne Estuary which evolved around the now threatened resources. These 51 actions provide the framework for the projects the program oversees, covering issues as diverse as habitat management to water quality to education and cultural preservation and sustainable economic development. Interwoven throughout these plans is an emphasis on coordinated planning between agencies and individuals and the value of partnerships in effectively and efficiently making positive changes.

## What has been done to Implement the BTNEP Management Plan?

Because the Barataria-Terrebonne National Estuary Program is made up of many partners, implementation of the management plan is not limited to the Program Office, and in fact occurs in a variety of ways. Projects and initiatives of established local, state and federal government programs that have agreed to take on a lead role are one of the vehicles for Action Plan implementation. Another avenue is through projects, often completed through contracts, which are funded by the U.S. Environmental Protection Agency (EPA), guided by the Management Conference, and which the program office staff in Thibodaux oversee. In addition, implementation occurs through the efforts of individuals or groups who work either independently, or in cooperation with Program Office staff.

## **Land Loss**

Three of the seven Priority Problems are intricately linked to the issue of wetland loss in the Barataria-Terrebonne Estuary – hydrologic modification, reduced sediment flows, and habitat loss/modification. A considerable amount of energy from the regional natural resource community has been allocated to these issues, and many Action Plans in the CCMP identify strategies to address these problems.

One principle mechanism to address wetland loss is coastal restoration, and includes activities such as the effective use of dredged material, revegetation, placement of Christmas tree structures, freshwater/sediment diversions, and shoreline protection. These coastal restoration activities have been applied to interior marshes, bay and bayou shorelines, and barrier islands. Many Barataria-Terrebonne partners, including the Louisiana Department of Natural Resources and the Coastal Wetlands Planning, Protection, and Restoration (CWPPRA) Task Force are involved in implementing coastal restoration projects in the estuary. Thousands of acres of wetlands and miles of bay and bayou shorelines have benefited from these activities. Other efforts include Coast 2050, a collective effort among the Louisiana Department of Natural Resources Coastal Zone Management Authority, the CWPPRA Task Force, and the Louisiana Wetland Conservation and Restoration Authority. Using the multi-stakeholder approach first proven in Louisiana by the BTNEP, the Coast 2050 plan for restoring Louisiana's entire coast was completed in 1999.

The BTNEP Program Office staff is currently working with representatives from the EPA, the Governor's Office of Coastal Activities, and other members of the CWPPRA task force to investigate strategies for introducing more fresh water into the Barataria and Terrebonne basins. With the recent severe to moderate stressing of nearly 2/3 of the salt marsh in these basins, the Estuary Program is being asked to take a strong role in convening working groups to respond to this emergency.

Individuals are also working to protect the estuary. The Houma-Terrebonne Chamber of Commerce has sparked an initiative that has blossomed in South Louisiana. Project S.O.S (Save Our Soil) is a broad part-

Continued on page 14